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PATENT  
Docket No. 2338.2.2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant: Bernhard Dohrmann  
Serial No.: 09/981,287  
Filed: Oct. 18, 2001  
For: **APPARATUS AND METHOD FOR DELIVERY OF  
INSTRUCTIONAL INFORMATION**  
Examiner: Nikolai A. Gishnock

Group Art  
Unit: 3714

**APPEAL BRIEF**

Mail Stop Appeal Brief-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Examiner:

The USPTO received Appellant's timely Notice of Appeal on December 30, 2008, which was filed in response to the Office Action mailed October 3, 2008. Appellant appeals the rejection of pending Claims 1-4, 7, 11, 12, and 42-78.

This Brief is being filed under the provisions of 37 C.F.R. § 41.37. An Appeal Brief was timely within two months of the filing of the notice of appeal. The Appellant received a Notification of Non-Compliant Appeal Brief mailed March 25, 2009 and this amended Appeal Brief is filed in response and corrects the Status of Claims section. The filing fee set forth in 37 C.F.R. § 41.20(b)(2) was submitted previously.

## **1. REAL PARTY IN INTEREST**

The real party in interest is the inventor, Bernhard Dohrmann.

## **2. RELATED APPEALS AND INTERFERENCES**

There are no related appeals, interferences, or judicial proceedings.

## **3. STATUS OF CLAIMS**

The Office Action cites the following art: U.S. Patent No. 5,850,250 to Konopka et al. [hereinafter Konopka], U.S. Patent No. 6,034,652 to Freiburger et al. [hereinafter Freiburger], and U.S. Patent No. 6,647,119 to Slezak [hereinafter Slezak].

Claims 1-4, 7, 11, 12, and 42-78 are pending in the case. Claims 5, 6, 8-10, 13-41 are canceled. Claims 1, 59, and 67 are independent claims. Claims 1-4, 42-46, and 49-78 are rejected under 35 USC § 103(a) as unpatentable over Konopka in view Freiburger. Claims 7, 11, 12, 47, and 48 are rejected under 35 U.S.C. § 103(a) as unpatentable over Konopka, in view of Freiburger, in further view of Slezak.

The claims remain rejected as set forth in the Office Action issued October 3, 2008. Appellant appeals the rejection of Claims 1-4, 7, 11, 12, and 42-78.

## **4. STATUS OF AMENDMENTS**

Amendments submitted August 14, 2008 have been entered. No other proposed amendments are pending.

## **5. SUMMARY OF CLAIMED SUBJECT MATTER**

The claimed subject matter deals with information delivery and education that conforms the classroom to the way learning is actually achieved. See second substitute specification for application 09/981,287 (hereinafter '287) ¶ 8, p. 4, ll. 13-24. The problem addressed is the uninteresting and dull display of information for students. '287 at ¶ 4, p. 2, ll. 19-20, ¶ 22, p. 7,

ll. 19-25. The claimed invention presents a tool for information delivery and education that conforms the classroom into an atmosphere of auditory and visual stimulations that improve concentration. ‘287 at ¶ 22, p. 7, ll. 21-25. In addition, the claimed invention includes operating within a classroom environment that is equipped with integrated information delivery capabilities. ‘287 at ¶ 12, p. 5, l. 24.

Specifically, the controlling unit provides sequence, duration and content modifications to the display system from the sources that provide data. ‘287 at ¶ 12, p. 5, ll. 25-27. Each source communicates with the screens, the speakers and the control unit for receiving control commands and transferring data signals. ‘287 at ¶ 12, p. 5, ll. 26-28. The invention provides for software configured to control the content and sequence of information display on display screens, and includes databases, control commands, and specific conditions for formatting the audio and visual display. ‘287 at ¶ 13, p. 6, ll. 1-4. The invention includes a user-friendly graphical user interface to control the data sources. ‘287 at ¶ 14, p. 6, ll. 5-6. The invention includes an apparatus and method for an integrated remote-learning facility. ‘287 at ¶ 15, p. 6, ll. 10-11. The invention relates to unique software, which includes machine-readable mediums and programming codes with instructions or sequence steps. ‘287 at ¶ 16, p. 6, ll. 15-20, ¶ 16, p. 7, ll. 3-4.

Embodiments of the present invention include apparatuses, a module, a system, a computer readable storage medium, and a method.<sup>1</sup> See e.g. Claims 1, 59, and 67.

Claim 1 presents a computer implemented delivery system for instructional information. ‘287 at ¶ 25, p. 8, ll. 18-19; fig. 1A. The system has at least one source that provides data. ‘287 at ¶ 38, p. 15, ll. 8-10. The data includes instructional information and background information. ‘287 at ¶ 38, p. 15, ll. 15-17. The system also includes at least one user interface. ‘287 at ¶ 25, p. 8, ll. 24-25. The interface receives input from a user. The input is related to execution of the data. ‘287 at ¶ 25, p. 8, ll. 24-26, original Claim 1.

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<sup>1</sup> Although Appellant has summarized embodiments of the present invention, the present invention is defined by the claims themselves. Appellant’s summary is not intended to limit the scope of the claims or individual claim elements in complying with the appeal brief requirements under 37 C.F.R. § 41.37(c)(v).

The system includes plurality of output devices, ‘287 at ¶ 25, p. 8, ll. 23-24, in a classroom that receive audio and visual components of the instructional information and background information. ‘287 at ¶¶ 25-26, p. 8, l. 18 to p. 9, l. 10, ¶ 27, p. 9, ll. 24, 28, ¶ 30, p. 10, l. 27. The plurality of output devices includes at least three visual displays. ‘287 at ¶ 26, p. 9, ll. 11-12. The system projects instructional information on each of the visual displays. The instructional information is controlled by an operator, ‘287 at ¶ 30, p. 10, l. 26, and display of the background information is controlled by an auto-switching algorithm. ‘287 at ¶ 44, p. 18, ll. 17-26.

In the system, there is at least one processor that generates audio and visual components, ‘287 at Fig. 5, ¶ 27, p. 9, ll. 23-29, ¶ 50, p. 20, l. 28 to p. 21, l. 7, ¶ 53, p. 22, ll. 5-21, from the instructional information and background information. The system includes a computer readable medium that is accessible by the processor, ‘287 at ¶ 50, p. 21, l. 3. The computer-readable medium includes at least one predetermined rule. ‘287 at ¶ 44, p. 18, l. 12.

The instructions include:

1. Displaying instructional information selected by the operator on the visual displays until a triggering event. U.S. Provisional Patent Application No. 60/282,877, filed May 11, 2001 to Bernhard Dohrmann [hereinafter ‘877 Application or ‘877] at pp. 28, 37-38, 40-42, 44-46.
2. Display of the instructional information in a random pattern is on one or more of the visual displays in response to the triggering event. *Id.* At the triggering event, the random pattern of instructional information in a random sequence moves from one combination of one or more of the visual displays to another combination of one or more of the visual displays at a random interval. *Id.* The combination of the one or more visual displays includes a number of the visual displays less than all of the visual displays
3. Displays background images of the background information on one or more visual displays not displaying instructional information. *Id.*

The following quotation of Claim 1 includes reference numerals and parenthetical references to representative examples of the elements and components recited in Claim 1 in compliance with 37 CFR 41.37(c)(1)(v).

1. A computer implemented delivery system for instructional information ('287 at p. 8, ¶ 25, ll. 18-19; fig. 1A) comprising:
  - at least one source that provides data ('287 at p. 15, ¶ 38, ll. 8-10), the data comprising instructional information and background information ('287 at ¶ 25, p. 8, l. 18 to p. 9, l. 10, ¶ 38, p. 15, ll. 15-17);
  - at least one user interface ('287 at ¶ 25, p. 8, ll. 24-25) that receives input from a user, the input related to execution of the data ('287 at ¶ 25, p. 8, ll. 24-25, original Claim 1);
  - a plurality of output devices ('287 at p. 8, ¶ 25, ll. 23-24) in a classroom that receive audio and visual components of the instructional information and background information ('287 at p. 8, ¶ 25, ll. 20, 23, p. 9, ¶ 27, ll. 24, 28, p. 10, ¶ 30, l. 27) wherein the plurality of output devices includes at least three visual displays ('287 at p. 9, ¶ 26, ll. 11-12) and wherein display of the instructional information is controlled by an operator ('287 at ¶ 30, p. 10, ll. 26-27) and display of the background information is controlled by an auto-switching algorithm ('287 at ¶ 44, p. 18, ll. 17-26);
  - at least one processor that generates audio and visual components ('287 at ¶ 27, p. 9, ll. 23-29, ¶ 50, p. 21, ll. 1-3) from the instructional information and background information from provided data to at least one output device;
  - a computer-readable medium ('287 at ¶ 50, p. 21, ll. 1-2) accessible by the processor ('287 at ¶ 50, p. 21, l. 3) and including at least one predetermined rule ('287 at ¶ 44, p. 18, l. 12) comprising instructions for displaying instructional information selected by the operator on the visual displays until a triggering event ('877, p. 28, 37-38, 40-42, 44-46);

displaying the instructional information in a random pattern on one or more of the visual displays in response to the triggering event, wherein the random pattern comprises displaying the instructional information in a random sequence wherein the instructional information moves from one combination of one or more of the visual displays to another combination of one or more of the visual displays at a random interval ('877, p. 28, 37-38, 40-42, 44-46), wherein a combination of the one or more visual displays comprises a number of the visual displays less than all of the visual displays; and displaying background images of the background information on one or more visual displays not displaying instructional information, the background images displayed and replaced by the auto-switching algorithm that controls selection, sequence, and duration of the display of the background images ('877, p. 28, 37-38, 40-42, 44-46); and communication links that transmit data and information between the at least one source, the user interface, the processor and the output devices ('287 at ¶ 49, p. 20, l. 14, Fig. 5).

Claim 59 presents a method of providing instructional information using a computer implemented delivery system. '287 at ¶ 41, p. 16, l. 8. The system provides at least one source that provides the data. '287 at ¶ 41, p. 16, l. 20. The data includes instructional information and background information. '287 at ¶ 25, p. 8, l. 18 to p. 9, l. 10, ¶ 38, p. 15, ll. 15-16. The system also provides at least one user interface that receives input from a user related to the data. '287 at ¶ 41, p. 17, ll. 8-9. The interface provides a plurality of output devices in a classroom that receives audio and visual components of the instructional information and background information. '287 at ¶ 41, p. 16, ll. 23-29.

The plurality of output devices includes at least three visual displays, '287 at ¶ 43, p. 18, l. 7, that show at least three visual images and wherein display of the instructional information.

The information is controlled by an operator, ‘287 at ¶ 28, p. 10, ll. 3-4, and display of the background information is controlled by an auto-switching algorithm. ‘287 at ¶ 44, p. 18, ll. 17-26. The auto-switching algorithm provides at least one a processor, ‘287 at ¶ 50, p. 21, l. 3, that routes audio and visual components from the instructional information from provided data to at least one output device. ‘287 at ¶ 25, p. 8, ll. 20-24.

The system provides a computer-readable medium, ‘287 at ¶ 50, p. 21, ll. 1-2, accessible to the processor and including instructions including a set of rules directing the plurality of output devices on what to display. The rules include displaying instructional information selected by the operator on the at least three visual displays until a triggering event and displaying the instructional information in a random pattern on one or more of the visual displays in response to the triggering event. ‘877 at pp. 28, 37-38, 40-42, 44-46. The random pattern includes displaying the instructional information in a random sequence wherein the instructional information moves from one combination of one or more of the visual displays to another combination of one or more of the visual displays at a random interval. *Id.*

The combination of the one or more visual displays comprises a number of the visual displays less than all of the visual displays. *Id.* They system includes displaying background images of the background information on one or more of the at least three visual displays not displaying instructional information when the instructor is instructing a student. *Id.* The system includes background images displayed and replaced randomly by the auto-switching algorithm that controls selection, sequence, and duration of the display of the background images. ‘287 at ¶ 34, p. 13, ll. 12-14, ¶ 44, p. 18, ll. 17-26. The system provides a communication links that transmits data and information between the at least one source, the user interface, the processor and the output devices. ‘287 at ¶ 49, p. 20, l. 14, Fig. 5.

The following quotation of Claim 59 includes reference numerals and parenthetical references to representative examples of the elements and components recited in Claim 59 in compliance with 37 CFR 41.37(c)(1)(v).

59. A method of providing instructional information using a computer implemented delivery system (‘287 at ¶ 41, p. 16, l. 8), comprising:

providing at least one source that provides the data ('287 at ¶ 41, p. 16, l. 20), the data comprising instructional information and background information ('287 at ¶ 25, p. 8, l. 18 to ¶ 25, p. 9, l. 10, ¶ 38, p. 15, ll. 15-16);

providing at least one user interface that receives input from a user related to the data ('287 at ¶ 41, p. 17, ll. 8-9);

providing a plurality of output devices in a classroom that receives audio and visual components of the instructional information and background information ('287 at ¶ 41, p. 16, ll. 23-29), wherein the plurality of output devices includes at least three visual displays ('287 at ¶ 43, p. 18, l. 7) that show at least three visual images and wherein display of the instructional information is controlled by an operator ('287 at ¶ 28, p. 10, ll. 3-4) and display of the background information is controlled by an auto-switching algorithm ('287 at ¶ 44, p. 18, ll. 17-26);

providing at least one a processor ('287 at ¶ 50, p. 21, l. 3) that routes audio and visual components from the instructional information from provided data to at least one output device ('287 at ¶ 25, p. 8, ll. 20-24);

providing a computer-readable medium ('287 at ¶ 50, p. 21, ll. 1-2) accessible to the processor and including instructions comprising a set of rules directing the plurality of output devices on what to display, wherein the rules include:

- (a) displaying instructional information selected by the operator on the at least three visual displays until a triggering event ('877 at pp. 28, 37-38, 40-42, 44-46);
- (b) displaying the instructional information in a random pattern on one or more of the visual displays in response to the triggering event, wherein the random pattern comprises displaying the instructional information in a random sequence wherein the instructional information moves from one combination of one or more of the visual displays to another combination of one or more of the visual displays



- at a random interval, wherein a combination of the one or more visual displays comprises a number of the visual displays less than all of the visual displays ('877 at pp. 28, 37-38, 40-42, 44-46)
- (c) displaying background images of the background information on one or more of the at least three visual displays not displaying instructional information when the instructor is instructing a student ('877 at pp. 28, 37-38, 40-42, 44-46.), the background images displayed and replaced randomly by the auto-switching algorithm that controls selection, sequence, and duration of the display of the background images ('287 at ¶ 34, p. 13, ll. 12-14, ¶ 44, p. 18, ll. 17-26); and
  - (d) providing a communication links that transmits data and information between the at least one source, the user interface, the processor and the output devices ('287 at ¶ 49, p. 20, l. 14, Fig. 5).

Claim 67 presents a computer implemented delivery system for instructional information. '287 at ¶ 25, p. 8, ll. 18-19; Fig. 1A. They system consists of at least one source that provides data, '287 at ¶ 38, p. 15, ll. 8-10, including an image capture device. '287 at ¶ 41, p. 16, l. 26. The system consists of the data comprising instructional information and background information. '287 at ¶ 25, p. 8, l. 18 to p. 9, l. 10, ¶ 38, p. 15, ll. 15-17. The system consists of at least one user interface, '287 at ¶ 25, p. 8, ll. 24-25, that receives input from a user, '287 at ¶ 25, p. 8, ll. 24-25, which input is related to execution of the data.

The system consists of a plurality of output devices, '287 at ¶ 25, p. 8, ll. 23-24, in a classroom that receive audio and visual components of the instructional information and background information. '287 at ¶ 25, p. 8, ll. 20, 23, ¶ 27, p. 9, ll. 24, 28, ¶ 30, p. 10, l. 27. The plurality of output devices includes three visual displays, '287 at ¶ 26, p. 9, ll. 11-12, wherein display of the instructional information is controlled by an operator, '287 at ¶ 30, p. 10, l. 26, and

an auto-switching algorithm, while the display of the background information is controlled by the auto-switching algorithm. ‘287 at ¶ 44, p. 18, ll. 17-26.

The system includes at least one processor that routes audio and visual components, ‘287 at ¶ 27, p. 9, ll. 23-29, ¶ 50, p. 21, ll. 1-3, from the instructional information and background information from provided data to at least one output device. The output device consists of a computer-readable medium, ‘287 at ¶ 50, p. 21, ll. 1-2, accessible by the processor. ‘287 at ¶ 50, p. 21, l. 3. The output device includes instructions for displaying instructional information chosen by the operator on the three visual displays until a triggering event. ‘877 at pp. 28, 37-38, 40-42, 44-46. The output device also displays the instructional information in a random pattern on the visual displays in response to the triggering event on one visual display at a time, wherein the random pattern is controlled by the auto-switching algorithm and displays the instructional information in a random sequence wherein the instructional information moves from one of the visual displays to another one of the visual displays at a random interval. *Id.* The auto-switching algorithm controls the sequence and duration of the display of the instructional information; and displays in response to the triggering event, background images of the background information on the three visual displays not displaying the instructional information. The auto-switching algorithm controls the background images displayed and replaced at random, controlling selection, sequence, and duration of the display of the background images. ‘287 at ¶ 34, p. 13, l. 11, ¶ 44, p. 18, ll. 17-26, ‘877 at p. 28.

The system includes communication links that transmit data and information between the at least one source, the user interface, the processor and the output devices. ‘287 at ¶ 49, p. 20, l.14, Fig. 5.

The following quotation of Claim 67 includes reference numerals and parenthetical references to representative examples of the elements and components recited in Claim 67 in compliance with 37 CFR 41.37(c)(1)(v).

67. A computer implemented delivery system for instructional information (‘287 at ¶ 25, p. 8, ll. 18-19; fig. 1A) consisting essentially of:

at least one source that provides data (‘287 at ¶ 38, p. 15, ll. 8-10), including an image capture device (‘287 at ¶ 41, p. 16, l. 26), the data comprising

instructional information and background information ('287 at ¶ 25, p. 8, l. 18 to p. 9, l. 10, ¶ 38, p. 15, ll. 15-17);

at least one user interface ('287 at ¶ 25, p. 8, ll. 24-25) that receives input from a user ('287 at ¶ 25, p. 8, ll. 24-25), the input related to execution of the data;

a plurality of output devices ('287 at ¶ 25, p. 8, ll. 23-24) in a classroom that receive audio and visual components of the instructional information and background information ('287 at ¶ 25, p. 8, ll. 20, 23, ¶ 27, p. 9, ll. 24, 28, ¶ 30, p. 10, l. 27), wherein the plurality of output devices includes three visual displays ('287 at ¶ 26, p. 9, ll. 11-12) and wherein display of the instructional information is controlled by an operator ('287 at ¶ 30, p. 10, l. 26) and an auto-switching algorithm and display of the background information is controlled by the auto-switching algorithm ('287 at ¶ 44, p. 18, ll. 17-26);

at least one processor that routes audio and visual components ('287 at ¶ 27, p. 9, ll. 23-29, ¶ 50, p. 21, ll. 1-3) from the instructional information and background information from provided data to at least one output device;

a computer-readable medium ('287 at ¶ 50, p. 21, ll. 1-2) accessible by the processor ('287 at ¶ 50, p. 21, l. 3) and including instructions for:

- displaying instructional information chosen by the operator on the three visual displays until a triggering event ('877 at pp. 28, 37-38, 40-42, 44-46);
- displaying the instructional information in a random pattern on the visual displays in response to the triggering event on one visual display at a time, wherein the random pattern is controlled by the auto-switching algorithm and comprises displaying the instructional information in a random sequence wherein the instructional information moves from one of the visual displays to another one of the visual displays at a random interval, the auto-switching algorithm

controlling sequence and duration of the display of the instructional information ('877 at pp. 28, 37-38, 40-42, 44-46); and

displaying in response to the triggering event background images of the background information on the three visual displays not displaying the instructional information, the background images displayed and replaced at random by the auto-switching algorithm that controls selection, sequence, and duration of the display of the background images ('877 at pp. 28, 37-38, 40-42, 44-46); and

communication links that transmit data and information between the at least one source, the user interface, the processor and the output devices ('287 at ¶ 49, p. 20, l. 14).

Claim 42 presents a system of Claim 1 where the background images are displayed on all of the at least three visual displays after the expiration of a timeout period. '287 at p. 13, 35, ll. 20-26, '877 at pp. 28, 37-38, 40-42, 44-46. The following quotation of Claim 42 includes reference numerals and parenthetical references to representative examples of the elements and components recited in Claim 42 in compliance with 37 CFR 41.37(c)(1)(v).

Claim 43 presents a system of Claim 1, wherein the triggering event comprises receiving a command from the operator. '287 at ¶ 31, p. 12, l. 2, '877 at pp. 28, 37-38, 40-42, 44-46.

Claim 44 presents a system of Claim 1, wherein the triggering event comprises a predetermined time for displaying the instructional information. '287 at ¶ 35, p. 13, l. 28 to p. 14, l. 2. Claim 45 presents a system of Claim 1 including displaying random special effect transitions of one or more of the background images '287 at ¶ 27, p. 9, ll. 24-26 and the instructional information being displayed on each of the at least three visual displays. '287 at ¶ 26, p. 9, l. 11, '877 at pp. 37-38.

Claim 47 presents a system of Claim 1, wherein displaying the instructional information in a random pattern further includes displaying the instructional information in a random pattern for a predetermined period of time. One of background images and additional instructional information is displayed after the predetermined period of time. '287 at ¶ 34, p. 13, ll. 7-15. Claim 74 presents a system of Claim 1 where the background images are displayed according to a random duration with random background images. '287 at ¶ 44, p. 18, ll. 17-26, '877 at pp. 28, 37-38, 40-42, 44-46.

The following quotation of Claims 42-45, 47, and 74 includes reference numerals and parenthetical references to representative examples of the elements and components recited in Claim 74 in compliance with 37 CFR 41.37(c)(1)(v).

42. The system of claim 1, wherein the at least one predetermined rule further includes displaying a random sequence of the background images on each of the at least three visual displays after expiration of a timeout period ('287 at p. 13, 35, ll. 20-26, '877 at pp. 28, 37-38, 40-42, 44-46).
43. The system of claim 1, wherein the triggering event comprises receiving a command from the operator ('287 at ¶ 31, p. 12, l. 2, '877 at pp. 28, 37-38, 40-42, 44-46).
44. The system of claim 1, wherein the triggering event comprises a predetermined time for displaying the instructional information ('287 at ¶ 35, p. 13, l. 28 to p. 14 l. 2).
45. The system of claim 1, wherein the at least one predetermined rule further includes displaying random special effect transitions of one or more of the background images ('287 at ¶ 27, p. 9, ll. 24-26) and the instructional information being displayed on each of the at least three visual displays ('287 at ¶ 26, p. 9, l. 11, '877 at pp. 37-38).
47. The system of claim 1, wherein displaying the instructional information in a random pattern further comprises displaying the instructional information in a random pattern for

a predetermined period of time, wherein one of background images and additional instructional information is displayed after the predetermined period of time ('287 at ¶ 34, p. 13, ll. 7-15).

74. The computer implemented delivery system of claim 1, wherein the auto-switching algorithm replaces displayed background images according to a random duration with random background images. ('287 at ¶ 44, p. 18, ll. 17-26. '877 at pp. 28, 37-38, 40-42, 44-46).

## **6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

**I.** Whether the Examiner properly rejected Claims 1-4, 42-46, and 49-78 under 35 U.S.C. § 103(a) as unpatentable over Konopka in view of Freiburger and properly rejected Claims 7, 11, 12, 47, and 48 under 35 U.S.C. § 103(a) as unpatentable over Konopka in view of Freiburger and in further view of Slezak.

## 7. ARGUMENT

I. The rejection of Claims 1-4, 42-46, and 49-78 under 35 U.S.C. §103(a) as unpatentable over Konopka in view of Freiburger is improper because Konopka and Freiburger fail to teach each element of Claims 1-4, 42-46, and 49-78.

II. The rejection of Claims 1-4, 42-46, and 49-78 under 35 U.S.C. §103(a) as unpatentable over Konopka in view of Freiburger is improper because both Konopka and Freiburger teach away from the claimed invention and because Freiburger destroys utility of Konopka and vice versa.

III. The rejection of Claim 47 under 35 U.S.C. §103(a) as unpatentable over Konopka in view of Freiburger and in further view of Slezak is improper because Konopka, Freiburger, and Slezak fail to teach each element of Claim 47

IV. Claims 2-4, 7, 11, 12, 42-58, and 60-66, 68-78 are allowable because they depend from otherwise allowable claims.

**I. Konopka and Freiburger fail to teach each element of Claims 1-4, 7, 11, 12, and 42-78, Claims 1, 59, and 67**

The Office Action mailed September 30, 2008 [hereinafter “Office Action”] rejects Claims 1-4, 7, 11, 12, and 42-78 under 35 U.S.C. § 103(a) as being unpatentable over Konopka in view of Freiburger. The Appellant respectfully traverses this rejection. The Examiner bears the initial burden of establishing a *prima facie* case of obviousness. See MPEP § 2142. In order to determine obviousness, the Examiner must consider the differences between the claimed invention and the prior art. In addition, the Examiner must provide a “clear articulation of the reason(s) why the claimed invention would have been obvious.” MPEP §2141[III]. The Appellant respectfully asserts that Konopka and Freiburger combined fail to teach all of the elements of the claims and that the Office Action has failed to make out a *prima facie* case of obviousness.

Claim 1 recites three or more visual displays in a classroom and a computer-readable medium comprising instructions for: 1) displaying instructional information selected by the operator on the visual displays until a triggering event, 2) displaying the instructional



information in a random pattern on one or more of the visual displays in response to the triggering event where the instructional material is displayed on less than all of the visual displays, and 3) displaying background information on the displays not displaying instructional material where the background material is displayed in a random sequence controlled by an auto-switching algorithm. This unique way of presenting instructional material to students maintains student attention and differs significantly from the typical classroom paradigm of maintaining instructional information on a display until new instructional material is presented.

By way of review, Konopka teaches a distance learning system where a group of monitors and a camera are located at the front of each classroom within a group of classrooms and another group of monitors and camera at the back of each classroom. Konopka at Abstract, col. 3, ll. 25-60. One monitor at the front of the classrooms is larger than the others and is dedicated to either the image of the instructor or input from a document camera or video cassette recorder (“VCR”). *Id.* at Fig. 2a, col. 6, ll. 32-38. The other monitors at the front of each class are dedicated to display the students in other classrooms so that the students in the group of classrooms feel a part of the same classroom. *Id.* at col. 3, ll. 10-22, 45-47, col. 6, ll. 32-46. A camera at the front of each classroom captures images of the students in the classroom. *Id.* at col. 3, ll. 50-52, col. 7, ll. 4-11.

The monitors at the back of the classroom display the students in the classrooms as well as well as an image of the teacher so the teacher can see himself/herself. *Id.* at col. 3, ll. 40-45. A camera at the back of the classroom captures the image of the teacher to be broadcast to the remote classrooms and to a monitor at the rear of the classrooms. *Id.* at col. 3, ll. 48-50, col. 7, ll. 50-53, col. 8, 6-12. Konopka briefly mentions once an embodiment where one monitor at the front of the classes temporarily displays a “teaching image” instead of students from a classroom. *Id.* at col. 4, ll. 24-30.

Konopka does not teach, disclose, or suggest displaying instructional information on the all of the visual displays in the classroom. Konopka does not teach, disclose, or suggest randomly displaying the instructional information on less than the total number of displays after a triggering event. Konopka does not teach, disclose, or suggest randomly displaying background information on the visual displays not displaying instructional information or controlling display of the background information using an auto-switching algorithm.

Freiberger discloses an attention manager that displays an image generated from content data in the vicinity of a display device in a manner that engages the peripheral attention of a user in an unobtrusive manner. Freiberger at col. 2, ll. 1-18, col. 3, ll. 11-18. The content data is received from a content provider. *Id.* at col. 2, ll. 23-25, col. 3, ll. 11-18. In one mode of operation, the attention manager displays the images from the content data after an idle time in a primary interaction of a user. *Id.* at col. 3, ll. 19-21. This mode may be implemented using a screen saver application program interface (“API”). *Id.* at col. 3, ll. 21-25, col. 9, ll. 11-21. Fig. 1.

In another embodiment, the attention manager displays the content data while the user engages in the primary interaction. *Id.* at col. 3, ll. 25-31. This is referred to in Freiberger as the “wallpaper embodiment.” *Id.* The attention manager displays the images of the content data according to scheduling instructions that enable display of images generated from one or more sets of content data “automatically without user intervention, in a predetermined manner.” *Id.* at col. 7, ll. 8-15. The content data scheduling instructions “can specify, for example, the duration of time that the image or images generated from a set of content data can be displayed, an order in which the images generated from a plurality of sets of content data are displayed, a time or times at which the image or images generated from a set of content data can or cannot be displayed, and/or constraint on the number of times that the image or images generated from a set of content data can be displayed.” *Id.* at col. 4, ll. 47-59.

Freiberger does not teach, disclose, or suggest that the primary interaction occurs on multiple visual displays, that a display of the primary interaction is randomly displayed on multiple displays after a triggering event, that a display of the primary interaction is randomly displayed on less than all of a number of multiple displays, or that the content data is displayed randomly with respect to duration.

The Office Action states that Konopka discloses displaying instructional information on the visual displays until a triggering event, as recited in Claim 1, and cites as evidence: “teacher’s workstation with a control panel, linked to the network and audio/video components in the classroom for presentations, 8:38-56; the teacher is able to switch between devices to control the display, 7:50-53; the switch operation is understood to be a triggering event.” Office Action at pp. 3-4. The Appellant disagrees.

As stated above, Konopka teaches displaying instructional information on a single display monitor, Konopka at Fig. 2a, col. 6, ll. 32-38, except for a single mention that one monitor dedicated to displaying students in another classroom only temporarily may display instructional material. *Id.* at col. 4, ll. 24-30. Konopka never teaches that instructional material is displayed on all of the monitors. Instead Konopka teaches that a large portion of the displays are dedicated to displaying students in classrooms.

The Office Action states that the switch operation may be a triggering event. Office Action at p. 4. The Appellant disagrees. Konopka teaches that a user may switch between a teacher image, a document camera image, and a VCR image on the larger monitor at the front of each classroom and again only mentions that a single monitor dedicated to displaying students may temporarily display instructional material. Konopka at Fig. 2a, col. 4, ll. 24-30, col. 6, ll. 32-38. This switching of instructional material is not the same as the claimed triggering event that changes from a display of instructional material on the three or more visual displays to randomly displaying the instructional material on less than all of the visual displays.

Likewise Freiburger does not teach three or more visual displays and displaying any kind of instructional material on multiple displays but merely discloses displaying content data either during an idle period or while a primary interaction is active. Freiburger at col. 3, ll. 11-51. Freiburger also does not teach the claimed triggering event but merely mentions a screen-saver timeout that switches to exclusively displaying content data. *Id.* at col. 3, ll. 21-25, col. 9, ll. 11-21. Fig. 1.

The Office Action correctly states that Konopka does not disclose displaying the instructional information in a random pattern on one or more of the visual displays in response to the triggering event where the instructional material is displayed on less than all of the visual displays, but states that Freiburger recites this limitation. Office Action at p. 6. The Office Action states that Freiburger teaches instructions for switching time between background images and instructions for controlling display duration and special effects of the background images and cites column 8, line 37 to column 9, line 43 (determining an idle period or idle condition, via an idle timer or apparatus to ascertain a user's attention focus at predefined time intervals), column 9, line 44 to column 10, line 42 (generating a display of a set of content data if an idle period is detected), and column 21, lines 50-54 (package file can also include information

governing the presentation of the set of content data, such as screen position, special animation effects, and display duration) as evidence. *Id.* at pp. 6-7 (emphasis added).

The Office Action also states that Freiburger further teaches where the content display system can include instructions for evaluating a Gaussian probability function each time a set of content data in the schedule is presented for display, either displaying the content or not, based on a consideration of a variety of factors and cites column 26, line 52 to column 27, line 15 of Freiburger as evidence and states that that this probability function is understood to be a random probability of displaying content. *Id.* at p. 7 (emphasis added). The Office Action then makes the leap that “[t]his probability function is understood to be a *random* probability displaying content” and that “[t]his probability function taught by Freiburger would be evaluated by the content scheduler to control the idle period, display duration, and special animation effects of the content display, as used in the classroom instructional display system of Konopka.” *Id.* The Office Action then concludes that it would have been obvious to have used this probability function of Freiburger to “implement random switching times, display durations, and special effects of randomly-selected background images taught by Freiburger, in the instructional display taught by Konopka in order to use the unused capacity of the display device and the viewer’s attention.” *Id.* The Appellant disagrees.

First, the Gaussian probability function as taught by Freiburger does not generate a random display. A Gaussian probability function is not equivalent to a random function. In addition, the way in which Freiburger uses the probability function would not generate a random display as claimed. Freiburger teaches a formula,  $n^p$  wherein  $n$  is a constant between 1 and 2 and  $p$  is a variable that indicates user preference of a particular set of content data. Freiburger at col. 26, ll. 57-63. Freiburger teaches that each time a user indicates preference for the content data, either positive or negative, the variable  $p$  is respectively incremented or decremented and the formula is then only used to determine if the set of content data is displayed in the future. *Id.* at col. 26, l. 52 to col. 27, l. 15. This method taught by Freiburger is merely a method of selecting if a set of content data is displayed or not. This is much different than the claimed random display of instructional material.

In fact the word “random” appears in Freiburger four times; once in a reference to random access memory, twice with a web site address [www.randomhouse.com](http://www.randomhouse.com), and once to state

that a set of content data to be displayed is selected randomly only to “resolve a conflict between two sets of content data having scheduling parameters that specify display at the same sequential position in the display schedule.” *Id.* at col. 14, ll. 20-21, col. 22, ll. 24-50, col. 10, ll. 58-64. None of the references to “random” in Freiberger read on randomly displaying instructional material as claimed.

Citing Freiberger’s Gaussian probability used to express user preference for displaying a particular set of content data to say that one of skill in the art would then somehow know to display instructional information randomly after a triggering event is a stretch by any standard and is an unfair and inappropriate use of an obviousness rejection. Freiberger simply does not teach displaying instructional information randomly on less than all of a group of three or more displays in response to a triggering event.

Second, Freiberger does not teach in any way displaying images related to Freiberger’s “primary user interaction” on three or more visual displays. Freiberger states directly that the primary user interaction includes any operation of “*the* computer” and “[w]hen the user is interacting with *a* computer, the primary user interaction includes any operation of *the* computer that occurs to enable or to support the performance of the function or functions that provide the basis for the user’s use of *the* computer.” *Id.* at col. 8, ll. 14-23. Freiberger states that the “display device” may include “computer video display devices, televisions and audio speakers,” *id.* at col. 6, ll. 14, but goes no further in teaching embodiments of multiple visual display devices. Freiberger does not describe any embodiment where any image associated with a primary user interaction is displayed on three or more visual displays. Freiberger’s display of images on “a display device” does not read on displaying instructional material on the three or more visual displays as claimed.

Also, Freiberger is silent on controlling display of images related to the primary user interaction, other than after expiration of an idle time entering the “screen saver” mode where the display device displays only content data for at least a period of time, *id.* at col. 3, ll. 21-25, col. 9, ll. 11-21. Fig. 1, and then redisplaying the images associated with the primary user interaction in the same state as screen saver mode was entered when user activity is again detected. *Id.* at col. 11, ll. 42-55. Freiberger does not teach, disclose, or suggest displaying instructional

information on three or more visual displays and then displaying the same instructional information in a random pattern on less than all of the visual displays after a triggering event.

The Appellant respectfully asserts that Konopka combined with Freiburger fail to teach all of the limitations of Claim 1. The Appellant respectfully asserts that Claim 1 is allowable. The arguments made in favor of Claim 1 are equally applicable to Claims 59 and 67 and the Appellant respectfully asserts that Claims 59 and 67 are allowable.

#### Claim 42

The Office Action argues that Freiburger discloses displaying a random sequence of the background images on each of the at least three visual displays after expiration of a timeout period and cites in Freiburger the scheduling instructions ability to schedule when the content data is displayed as evidence. Office Action at pp. 5-6. The Appellant disagrees.

Konopka does not disclose the limitations of Claim 42 and Freiburger recites only displaying content data after expiration of an idle time or displaying the content data while the primary user interaction is active. Freiburger at col. 3, ll. 11-51. Freiburger does not teach a timeout in addition to a triggering event such that after the triggering event the instructional material is randomly displayed on less than all of the visual displays and then background images are displayed on all of the visual displays after a timeout period. When taken in conjunction with Claim 1, Claim 42 adds another dimension not taught in Freiburger or Konopka. The Appellant respectfully asserts that Claim 42 is allowable.

#### Claim 43

The Office Action correctly states that Konopka does not teach the limitations of Claim 43 but argues that Freiburger discloses that the triggering event comprises receiving a command from the operator. Office Action at p. 13. The Office Action states that “Freiberger teaches where an attention manager is activated by explicit direction from the user, such as by an on-screen icon or menu selection (9:30-45). Freiburger further teaches where the attention manager can be terminated if the user makes an input to the computer using an input device (11:42-67). The operator override for the auto-switching algorithm of Freiburger could be programmed into the computer-based instructional system of Konopka.” The Appellant disagrees.

The claimed triggering event changes a display of instructional information on all of the displays to randomly displaying the instructional material on less than all of the visual displays. The teaching of Freiburger of activating the attention manager by explicit direction from the user is not equivalent to the claimed triggering event. This manual activation of the attention manager only displays content data and does not change the image of instructional material on three or more visual displays to a random display of the instructional material on less than all of the visual displays. This manual activation of a program is not equivalent in any way to the claimed triggering event. The termination of the attention manager using an input device as taught by Freiburger changes from a display of the content data to a return to images related to the primary user interaction, Freiburger at col. 11, ll. 42-67. Again this termination is in no way related to the claimed triggering event. In addition, Konopka does not disclose the limitations of Claim 43. The Appellant respectfully asserts that Claim 43 is allowable.

#### Claim 44

The Office Action argues that Freiburger discloses that the triggering event comprises receiving a command from the operator. Office Action at pp. 4-6. The Appellant disagrees.

Konopka does not disclose the limitations of Claim 44 and Freiburger only discloses expiration of an idle time to display content data. Freiburger at col. 3, ll. 11-24. Freiburger does not disclose a triggering event that changes a display of instructional information on all of the displays to randomly displaying the instructional material on less than all of the visual displays, but only discloses displaying only content data during the idle time. *Id.* The Appellant respectfully asserts that Claim 44 is in condition for allowance.

#### Claim 45

The Office Action argues that Freiburger discloses the instructional information being displayed on each of the at least three visual displays. Office Action at pp. 6-7. The Appellant disagrees.

Konopka does not disclose displaying instructional information on all of the visual displays but only teaches displaying instructional information on one display or temporarily on a second display. Konopka at col. 4, ll. 24-30. Freiburger also does not disclose displaying

instructional material on three or more visual displays, but instead teaches displaying images from a primary user interaction on a display device. Freiberger at col. 3, ll. 11-51, col. 6, ll. 14. The Appellant respectfully asserts that Claim 45 is in condition for allowance.

#### Claim 74

The Office Action argues that Freiberger teaches wherein the auto-switching algorithm replaces displayed background images according to a random duration with random background images. Office Action at p. 7. The Office Action states that Freiberger teaches a Gaussian probability function and interprets this probability function as a random probability of displaying content. *Id.* The Appellant disagrees.

The probability function taught by Freiberger does not read on randomly displaying background information, but instead only displays or does not display a set of content data based on user input with regard to preference. Freiberger at col. 26, l. 53 to col. 27, l. 15. In addition, while Freiberger discusses scheduling instructions regarding image display duration, *id.* at col. 4, ll. 47-55, Freiberger does not teach, disclose, or suggest that random display duration of the content data. Freiberger teaches various ways to define scheduling instructions and that the scheduling instructions can vary in complexity, *id.* at col. 17, ll. 29-48, but Freiberger never teaches that the scheduling instructions define any type of random display duration. Konopka also does not teach the limitations of Claim 74. The Appellant respectfully asserts that Claim 74 is in condition for allowance.

#### **II. Konopka and Freiberger teach away from the claimed invention and destroy utility**

Obviousness may be rebutted by showing that “the art, in any material respect, teaches away from the claimed invention.” MPEP at § 2144.05.III. “A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. The degree of teaching away will of course depend on the particular facts; in general, a reference will teach away if it suggests that the line of development flowing from the reference’s disclosure is unlikely to be productive of the result sought by the



applicant.” *United States v. Adams*, 383 U.S. 39, 52, 148 USPQ 479, 484 (1966). The Supreme Court, in *KSR Int’l Co. v. Teleflex Inc.*, stated that “when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. \_\_\_\_\_, 82 USPQ2d 1385, 1395 (2007).

The combination of Konopka and Freiberger is improper because Freiberger changes the principle operation of Konopka, and vice versa. “[T]he claimed combination cannot change the principle of operation of the primary reference or render the reference inoperable for its intended purpose.” MPEP §2145[III]. If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. MPEP §2143.01.III *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

The invention recited in amended Claim 1 is advantageous because it breaks the paradigm of the standard classroom where instructional information is displayed sequentially on typically one screen. The instructional information remains until it is replaced by other instructional information. This method of instruction has been around for centuries and overhead projectors, computer generated displays, and the like have only extended the paradigm. This standard teaching method suffers because student’s minds drift while the instructional information is displayed.

The claimed invention successfully overcomes the problems of the standard classroom because by displaying the instructional information on all screens for a time and then randomly switching the instructional information interlaced with background information, the student’s minds are constantly stimulated and refocused each time the instructional information reappears. The background information also refocuses the students’ minds on the visual displays instead of other things. Each time the instructional information is presented again, it is reinforced in the minds of the students. The process of seeing the instructional information multiple times in a random sequence reinforces the instructional information. Keeping students

focused on what is presented and increases retention of the instructional information. The invention recited in amended Claim 1 allows students to learn and retain more.

Neither Konopka nor Freiberg teach displaying the instructional information and then displaying the instructional information randomly after the triggering event where background information is displayed randomly on screens not displaying the instructional information. The stated purpose of Konopka is to merely extend the standard classroom paradigm for remote learning. Konopka at Abstract, col. 1, ll. 10-19. The visual displays in Konopka are used to display students from a remote classroom in a classroom where the teacher is located and to display the instructional information and teacher in classrooms where the teacher is not present. *Id.* at col. 3, ll. 25-60. Konopka merely tries to extend the standard teaching paradigm to make multiple classrooms feel like they are one single classroom where instructional material is taught in a standard way.

Konopka teaches that several displays in each classroom are dedicated to displaying students, Konopka at col. 3, ll. 34-60, to make the classroom into a larger “virtual classroom.” *Id.* at col. 3, ll. 10-22. Konopka teaches a single, larger monitor at the front of each classroom for displaying the teacher, an image from a document camera, or a VCR, *id.*, only makes a fleeting reference to one student display monitor temporarily displaying instructional information. *Id.* at col. 4, ll. 23-29. Konopka’s teaching of dedicated monitors for displaying students teaches away from displaying instructional information on three or more visual displays and then, in response to a triggering event, displaying randomly the instructional information on less than all of the visual displays with background images displayed on visual displays not displaying the instructional information. One of skill in the art, at the time of the invention, viewing Konopka would be lead away from the claimed invention and would not look to Freiberger’s display of content data.

In addition, combining Freiberger with Konopka would render Konopka unsatisfactory for its intended purpose. Freiberger teaches displaying content data after expiration of an idle time period or in the vicinity of the display device. Freiberger col. 3, ll. 11-51. Adding this function to Konopka would require replacement of displays of students in other classrooms with content data, thus destroying the “virtual” classroom feel because the students in each classroom would not be able to view the students in the other classrooms. Alternatively, displaying content

data on the monitor dedicated to instructional information would require the instructional information to be covered or displayed smaller so that it would be more difficult for the students at the back of a classroom to read or view the instructional information. Thus combining Freiberger with Konopka renders Konopka unsatisfactory for its intended use.

Freiberger teaches a display device that displays images generated from a user's primary interaction with a computer and then displaying content data from a content provider after expiration of an idle period or displaying the content data in the vicinity of a display device during the user's primary interaction with the computer. Freiberger at col. 2, l. 1 to col. 5, l. 49. Freiberger teaches that the content data is displayed in "an unobtrusive manner that does not distract *the* user from the primary interaction." *Id.* at col. 2, ll. 15-17 (emphasis added).

Freiberger is not at all focused on classroom instruction but instead focuses on a single user as merely a way of advertising for a display near a person by displaying advertising or other material while a screen is not active or displaying the advertising material in portions of a screen not being used for an active task. Freiberger at Abstract, col. 1, ll. 6-10, col. 2, ll. 2-19. Freiberger teaches away from displaying instructional information on at least three displays in a classroom setting and then displaying the instructional information randomly on less than all of the visual displays. As argued above, one of skill in the art, first of all, would not be led to randomly displaying content data. In addition, displaying content data to peripherally appeal to a single user teaches away from the many students in a classroom and one of skill in the art reading Freiberger would not be led to Konopka.

The Appellant respectfully asserts that the Office Action has not made out a *prima facie* case of obviousness because one of skill in the art reading Konopka or Freiberger would not be led to the other reference. The Appellant therefore respectfully asserts that the section 103 obviousness rejection involving Konopka and Freiberger should be withdrawn.

**III. The rejection of Claims 7, 11, 12, 47, and 48 under 35 U.S.C. §103(a) as unpatentable over Konopka in view of Freiberger and in further view of Slezak is improper because Konopka Freiberger, and Slezak fail to teach each element of Claim 47 and because Claims 7, 11, 12, 47, and 48 are dependent from otherwise allowable claims.**

#### Claim 47

The Office Action correctly states that Konopka and Freiberger fail to teach wherein displaying the instructional information in a random pattern further comprises displaying the instructional information in a random pattern for a predetermined period of time, wherein one of background images and additional instructional information is displayed after the predetermined period of time. Office Action at p. 15. The Office Action cites Slezak as teaching the limitations of Claim 47, but the Appellant does not see any specific argument in the Office Action on pages 15 and 16 where Slezak teaches the limitations of Claim 47.

The Appellant respectfully asserts that Slezak does not teach displaying the instructional information in a random pattern for a predetermined period of time, wherein one of background images and additional instructional information is displayed after the predetermined period of time. The Appellant respectfully asserts that the Office Action has failed to make out a prima facie case of obviousness for Claim 47 because the Office Action fails to specifically argue where Slezak teaches the limitations of Claim 47. The Appellant respectfully asserts that Claim 47 is in condition for allowance.

#### **IV. Claims 2-4, 7, 11, 12, 42-58, and 60-66, 68-78 are allowable because they depend from otherwise allowable claims.**

As argued above, the Appellant respectfully asserts that independent Claims 1, 59, and 67 are allowable. Claims 2-4, 7, 11, 12, 42-58, and 72-78 depend on Claim 1, Claims 60-66 depend from Claim 59, and Claims 68-71 depend on Claim 67 and are therefore allowable because they depend from allowable claims. *See in re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

## **SUMMARY**

In view of the foregoing, Appellants respectfully assert that each of the claims on appeal has been improperly rejected because the rejections under 35 U.S.C. §103(a) are improper. Therefore, Appellants respectfully request reversal of the Examiner's rejections under 35 U.S.C. §103(a), and urges that pending Claims 1-4, 7, 11, 12, and 42-78 are ready for prompt allowance. Appellants appeal to the Board's objective and reasoned decision on this matter.

Respectfully submitted,

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## 8. CLAIMS APPENDIX

The claims involved in the appeal, namely Claims 1-4, 7, 1, 12, and 42-78, are listed below.

1. A computer implemented delivery system for instructional information comprising:
  - at least one source that provides data, the data comprising instructional information and background information;
  - at least one user interface that receives input from a user, the input related to execution of the data;
  - a plurality of output devices in a classroom that receive audio and visual components of the instructional information and background information, wherein the plurality of output devices includes at least three visual displays and wherein display of the instructional information is controlled by an operator and display of the background information is controlled by an auto-switching algorithm;
  - at least one processor that generates audio and visual components from the instructional information and background information from provided data to at least one output device;
  - a computer-readable medium accessible by the processor and including at least one predetermined rule comprising instructions for
    - displaying instructional information selected by the operator on the visual displays until a triggering event;
    - displaying the instructional information in a random pattern on one or more of the visual displays in response to the triggering event, wherein the random pattern comprises displaying the instructional information in a random sequence wherein the instructional information moves from one combination of one or more of the visual displays to another combination of one or more of the visual displays at a random interval, wherein a combination of the one or more visual displays

comprises a number of the visual displays less than all of the visual displays; and  
displaying background images of the background information on one or more visual displays not displaying instructional information, the background images displayed and replaced by the auto-switching algorithm that controls selection, sequence, and duration of the display of the background images; and  
communication links that transmit data and information between the at least one source, the user interface, the processor and the output devices.

2. The computer implemented delivery system of claim 1, wherein said at least one source comprises at least one of VCR, DVD, cameras, audio tuners, Internet and PC-based presentations.
3. The computer implemented delivery system of claim 1, wherein said at least one predetermined rule determines order and sequence in which data from each source is to be applied to the output devices.
4. The computer implemented delivery system of claim 1, wherein said input from a user determines which source provides data.
5. (Cancelled)
6. (Cancelled)
7. The computer implemented delivery system of claim 1, wherein each of the at least three visual display devices is further divided into a plurality of viewing areas in a predetermined pattern.

8. (Cancelled)
9. (Cancelled)
10. (Cancelled)
11. The computer implemented delivery system of claim 7, wherein at least one visual display device is divided into two or more unequal viewing areas.
12. The computer implemented delivery system of claim 1, wherein each of the at least three visual display devices is further divided into a plurality of viewing areas in a pattern different from the other visual display devices.
13. Claims 13-41 are cancelled.
42. The system of claim 1, wherein the at least one predetermined rule further includes displaying a random sequence of the background images on each of the at least three visual displays after expiration of a timeout period.
43. The system of claim 1, wherein the triggering event comprises receiving a command from the operator.
44. The system of claim 1, wherein the triggering event comprises a predetermined time for displaying the instructional information.
45. The system of claim 1, wherein the at least one predetermined rule further includes displaying random special effect transitions of one or more of the background images and the instructional information being displayed on each of the at least three visual displays.



46. The system of claim 1, wherein the at least one predetermined rule further includes displaying one or more of a student image of a student in the classroom and a teacher image on the display system on one of the at least three visual displays.
47. The system of claim 1, wherein displaying the instructional information in a random pattern further comprises displaying the instructional information in a random pattern for a predetermined period of time, wherein one of background images and additional instructional information is displayed after the predetermined period of time.
48. The system of claim 1, wherein first instructional information is displayed in a random pattern along with second instructional information, wherein the first instructional information is displayed with a first random pattern and a second instructional information is displayed with a second random pattern.
49. The system of claim 1, wherein the at least one predetermined rule further includes displaying background images during idle or transition periods on the display system on each of the at least three visual displays.
50. The system of claim 1, wherein the at least one predetermined rule further includes displaying previous information provided by the operator to reinforce the previous information on each of the at least three visual displays.
51. The system of claim 1, wherein the at least one predetermined rule further includes displaying new information provided by the operator when the operator overrides auto-switching algorithm on the display system on each of the at least three visual displays.
52. The system of claim 1, wherein the at least one predetermined rule further includes displaying background images that are related to the instructional information.

53. The system of claim 1, wherein the at least one predetermined rule further includes displaying background images that are unrelated to the instructional information.
54. The system of claim 53, wherein the unrelated background images are selected from the group of pictures consisting of: animals, forests, rivers, clouds, mountains, art work, people, buildings, vehicles, tools, plants, minerals, geological items, scenic sights, maps, cartoon images, segments of movies, segments of videos, and web site images.
55. The system of claim 53, wherein the unrelated background images are selected from the group of pictures consisting of: books, astronomy images, zoology items, biology items, historical items, futuristic information, economical information, financial information, statistical information, science fiction, fiction, scientific information, and theological information.
56. The system of claim 52, wherein the related background images are selected from the group of pictures consisting of: books, astronomy related images, mathematical related images, zoology related items, biology related items, historical related items, futuristic related information, economical related information, financial related information, statistical related information, science fiction related information, fiction related information, scientific related information, and theological related information.
57. The system of claim 1, wherein the at least three visual displays are viewable on a single display screen.
58. The system of claim 1, wherein the at least three visual displays are viewable on three distinct display screens.

59. A method of providing instructional information using a computer implemented delivery system, comprising:

- providing at least one source that provides the data, the data comprising instructional information and background information;
- providing at least one user interface that receives input from a user related to the data;
- providing a plurality of output devices in a classroom that receives audio and visual components of the instructional information and background information, wherein the plurality of output devices includes at least three visual displays that show at least three visual images and wherein display of the instructional information is controlled by an operator and display of the background information is controlled by an auto-switching algorithm;
- providing at least one a processor that routes audio and visual components from the instructional information from provided data to at least one output device;
- providing a computer-readable medium accessible to the processor and including instructions comprising a set of rules directing the plurality of output devices on what to display, wherein the rules include:
  - (a) displaying instructional information selected by the operator on the at least three visual displays until a triggering event;
  - (b) displaying the instructional information in a random pattern on one or more of the visual displays in response to the triggering event, wherein the random pattern comprises displaying the instructional information in a random sequence wherein the instructional information moves from one combination of one or more of the visual displays to another combination of one or more of the visual displays at a random interval, wherein a combination of the one or

- more visual displays comprises a number of the visual displays less than all of the visual displays;
- (c) displaying background images of the background information on one or more of the at least three visual displays not displaying instructional information when the instructor is instructing a student, the background images displayed and replaced randomly by the auto-switching algorithm that controls selection, sequence, and duration of the display of the background images; and
  - (d) providing a communication links that transmits data and information between the at least one source, the user interface, the processor and the output devices.
60. The method of claim 59, wherein the set of rules further includes displaying background images that are related to the instructional information.
61. The method of claim 59, wherein the set of rules further includes displaying background images that are unrelated to the instructional information.
62. The method of claim 61, wherein the unrelated background images are selected from the group of pictures consisting of: animals, forests, rivers, clouds, mountains, art work, people, buildings, vehicles, tools, plants, minerals, geological items, scenic sights, maps, cartoon images, segments of movies, segments of videos, and web site images.
63. The method of claim 61, wherein the unrelated background images are selected from the group of pictures consisting of: books, astronomy images, zoology items, biology items, historical items, futuristic information, economical information, financial information, statistical information, science fiction, fiction, scientific information, and theological information.

64. The method of claim 60, wherein the related background images are selected from the group of pictures consisting of: books, astronomy related images, mathematical related images, zoology related items, biology related items, historical related items, futuristic related information, economical related information, financial related information, statistical related information, science fiction related information, fiction related information, scientific related information, and theological related information.
65. The method of claim 59, further comprising:  
providing a speaker override module that is configured to allow the operator to temporarily override display of the background images and to display selected material by the instructor.
66. The method of claim 59, wherein the at least three visual displays is a single screen that is configured to incorporate at least three separate visual images thereon.
67. A computer implemented delivery system for instructional information consisting essentially of:  
at least one source that provides data, including an image capture device, the data comprising instructional information and background information;  
at least one user interface that receives input from a user, the input related to execution of the data;  
a plurality of output devices in a classroom that receive audio and visual components of the instructional information and background information, wherein the plurality of output devices includes three visual displays and wherein display of the instructional information is controlled by an operator and an auto-switching algorithm and display of the background information is controlled by the auto-switching algorithm;

at least one processor that routes audio and visual components from the instructional information and background information from provided data to at least one output device;

a computer-readable medium accessible by the processor and including instructions for:

- displaying instructional information chosen by the operator on the three visual displays until a triggering event;
- displaying the instructional information in a random pattern on the visual displays in response to the triggering event on one visual display at a time, wherein the random pattern is controlled by the auto-switching algorithm and comprises displaying the instructional information in a random sequence wherein the instructional information moves from one of the visual displays to another one of the visual displays at a random interval, the auto-switching algorithm controlling sequence and duration of the display of the instructional information; and
- displaying in response to the triggering event background images of the background information on the three visual displays not displaying the instructional information, the background images displayed and replaced at random by the auto-switching algorithm that controls selection, sequence, and duration of the display of the background images; and

communication links that transmit data and information between the at least one source, the user interface, the processor and the output devices.

68. The computer implemented delivery system of claim 67, wherein the user interface includes a screen and an input device.

69. The computer implemented delivery system of claim 67, wherein the source includes a microphone.
70. The computer implemented delivery system of claim 67, wherein the computer-readable medium includes instructions for enabling the operator to enter direction regarding image display through the user interface and instructions for carrying out such direction.
71. The computer implemented delivery system of claim 67, wherein the computer-readable medium further includes instructions for applying special effects to images.
72. The computer implemented delivery system of claim 1, wherein the auto-switching algorithm replaces displayed background images with varying patterns selected with table driven timeouts and the auto-switching algorithm displays and randomly moves the instructional information after the triggering event with table driven time outs.
73. The computer implemented delivery system of claim 72, wherein the table-driven timeouts preclude duplication of image pattern to a minimum frequency.
74. The computer implemented delivery system of claim 1, wherein the auto-switching algorithm replaces displayed background images according to a random duration with random background images.
75. The computer implemented delivery system of claim 1, wherein the auto-switching algorithm selects input sources for the background information supplying the background images.
76. The computer implemented delivery system of claim 1, further comprising an operator override for the auto-switching algorithm for one or more visual displays.

77. The computer implemented delivery system of claim 1, wherein the auto-switching algorithm changes display of the instructional information from one set of the one or more of the at least three visual displays to another set of one or more of the at least three visual displays and wherein the auto-switching algorithm moves the background images of the background information to one or more visual displays not displaying instructional information.
78. The computer implemented delivery system of claim 1, wherein the operator changes display of the instructional information from one set of the one or more of the at least three visual displays to another set of one or more of the at least three visual displays and the auto-switching algorithm moves the background images to visual displays not displaying instructional information.



#### **9. EVIDENCE APPENDIX**

There is no material to be included in the Evidence Appendix.

#### **10. RELATED PROCEEDINGS APPENDIX**

There is no material to be included in the Related Proceedings Appendix.